ing 500 mg of sulfadoxine and 25 mg of pyrimethamine. One tablet of Fansidar is taken weekly at the same time and for the same duration as chloroquine. Fansidar is not recommended for young children or pregnant women. ELIZABETH BARRETT-CONNOR, MD

REFERENCE

Health Information for International Travel, US Department of Health and Human Services publication No. 82-8280. Government Printing Office, 1982

Toward the Elimination of Measles

BEFORE INTRODUCTION of the measles vaccine in 1963, 500,000 cases of measles (rubeola) were reported yearly in the United States, though the actual case number was much higher. Also, 500 deaths and 1,000 cases of neurologic damage occurred yearly. In the first few years after the vaccine came into use measles incidence dropped 90%, but it declined no further through most of the 1970s. The reasons were that only 60% of US children were being immunized and that vaccine failure was common, due to the use of an ineffective inactivated vaccine in the early years, failure by some to adequately protect the live vaccine from heat and light and administration of live vaccine at too early an age. (In children under age 13 months, persisting maternal antibody may interfere with immunization.)

Measles has no nonhuman reservoir and no carrier state, and the measles vaccine confers long-term, probably lifelong, immunity. Consequently, in 1978 the Centers for Disease Control launched a campaign to eliminate continuing indigenous measles transmissions from the US by late 1982, based on a strategy of near-universal immunization and intense disease surveillance and outbreak control. We have come remarkably close to this goal. In 1982 only 1,700 cases were reported nationwide, a 99.7% drop from prevaccine era incidence. In all, 94% of US counties remained entirely measles-free in 1982. The principal reason for this achievement was enactment and strengthening of laws requiring measles immunization for entry to schools and child care centers in all 50 states during the late 1970s. Current surveys indicate that each year 96% of the nation's kindergarten pupils have satisfactory evidence of measles immunization.

Sporadic measles outbreaks still occur, however, particularly in large urban populations repeatedly exposed to measles importations and with lower immunization levels in older school pupils, who entered school before the immunization laws were strengthened. Several states are currently acting to improve the protection of older pupils, requiring that they provide schools with records showing at least the month and year of immunization with live measles vaccine given no earlier than the first birthday. In addition to giving measles vaccine to children at age 15 months and to all patients age 25 years and under who have not already been immunized or had the disease, physicians are urged to reimmunize those who received vaccine before their first birthday, when the seroconversion rate may have been only 80% to 85% or even lower, compared with 95% for immunization at older ages. Some authorities also recommend reimmunizing certain children previously immunized between 12 and 13 months of age.

Another major reason for the recent decline in measles incidence has been the public health effort to locate foci of continuing measles transmission and to eradicate these foci by prompt ring immunization. Physicians are urged to report immediately to county health departments by telephone all cases of measles, suspected measles and generalized rash with fever, without waiting until a definite diagnosis is made. Health departments can then promptly investigate and, if a focus of measles is found, define a zone of risk around the case(s) and immunize and isolate susceptible persons within that zone. LORING DALES, MD

REFERENCES

Hinman AR, Eddins DL, Kirby CD, et al: Progress in measles elimination. JAMA 1982 Mar 19; 247:1592-1595

Yeager AS, Harvey B, Crosson FJ Jr, et al: Need for measles revaccination in adolescents: Correlation with birth date prior to 1972. J Pediatr 1983 Feb; 102:191-195